## Appendix B

## Commissioning Letter

November 30, 1999

Professor Michael Bender Department of Geosciences Guyot Hall Princeton University Princeton, NJ 08544 USA

Dear Michael,

The U.S. Carbon Cycle research community has recently completed a Carbon Cycle Science Plan (CCSP). This plan calls for an integrated approach to carbon cycle research focused around 2 questions: (1) What has happened to the CO<sub>2</sub> that has already been emitted by human activities (past anthropogenic CO<sub>2</sub>); and (2) What will be the future atmospheric CO<sub>2</sub> concentrations resulting from both past and future emissions? Large scale atmospheric and oceanic in situ observations and modeling are called for to support several of the scientific goals of the CCSP, including quantifying and understanding the Northern Hemisphere terrestrial and global oceanic sinks and their associated physical and biogeochemical processes, and providing improved projections of atmospheric CO<sub>2</sub> concentrations.

As a contribution to the interagency process to develop an integrated carbon cycle program, NOAA is seeking assistance from the scientific community to define an implementation strategy to provide global information on the evolving distribution of CO<sub>2</sub>. I am pleased that you are willing to lead this planning effort to develop an initial implementation plan for large scale oceanic and atmospheric observations in support of the CCSP. In your role as Chair, I would ask that you:

- Establish a working group composed of scientific experts from the relevant disciplines
- Define the scope of scientific issues to be addressed by the observing system
- By fall 2000, outline an implementation vision and strategy for the next 10 years. This strategy might consider:
  - Building on existing networks and technology where appropriate;
  - Specifying needs for new technology development;
  - Priorities for sequencing of implementation activities;
  - Links to complementary international activities;
  - Opportunities for collaboration with complementary programs such as CLIVAR and GOOS; and
  - Interactions with modeling and process research.

While NOAA is taking the lead on soliciting this strategy from the community, your working group should consider how this strategy will implement the CCSP objectives in a multi-agency framework. You are encouraged to interact with other planning efforts underway to implement the CCSP, such as OCTET, SOLAS, EDOCC, and others that might be appropriate.

NOAA will provide support for meetings of the working group, a workshop of experts, if necessary, and publication of the final implementation plan. Please submit a planning letter outlining your expected resource requirements for the working group activities.

Thank you for agreeing to lead this important activity, and I look forward to seeing the results. Sincerely yours,

Lisa Dilling NOAA GCC Program Manager

cc. Elliott Spiker